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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/052,760

01/18/2002

Kazumi Nakayoshi

TSL942CON2

7128

7590

07/22/2003

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EXAMINER

SELLERS, ROBERT E

ART UNIT

PAPER NUMBER

1712

DATE MAILED: 07/22/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/052,760

Applicant(s)

NAKAYOSHI ET AL.

Examiner

Robert Sellers

Art Unit

1712

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 July 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 8-20 is/are pending in the application.
- 4a) Of the above claim(s) 16 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 8-15 and 17-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

The election with traverse of the species in Paper No. 5 is acknowledged.

The traversal is on the grounds that no reasons were given for the contention that the application contains claims to patentably distinct inventions, and a serious burden is not avoided but is created since searches for each group would have to be repeated.

This is not found persuasive because the criteria for an election of species is set forth in MPEP § 8-9.02(a). Each of components (A) to (F) defined in generic terms embraces patentably distinct species. The alkenyl radicals-containing polyorganosiloxane (A) includes such patentably distinct species as those with diverse trimethylsiloxy, dimethylvinylsiloxy and silanol endblocked organosiloxane copolymers such as those listed on page 17, lines 3-20 of the specification. The organohydrogensiloxane (B) embraces such patentably distinct species as trimethylsiloxy, dimethylhydrogensiloxy and silanol endblocked organosiloxane copolymers such as those described on page 19, line 11 to page 20, line 3. The organosilicon compound of the treated silver particles (C) encompasses such patentably distinct species as those denoted in claims 9-14. The platinum catalyst (D) covers such patentably distinct species as those set forth on page 24, lines 18-26. The alkoxysilicon group-containing organosilicon (E) includes such patentably distinct species as those disclosed on page 25, line 21 to page 27, line 1. The cure inhibitors (F) embraces such chemically and functionally different compounds as those espoused on page 27, line 25 to page 28, line 4.

The searches for each species within the broad parameters of the claimed generic components (A) to (F) would involve independent searches within classes 556, 528, 525 and 524 which are not repetitive and therefore unduly burdensome.

The requirement is still deemed proper and is therefore made FINAL.

Claim 16 is withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected species of cure inhibitor (E), there being no allowable generic or linking claim. Applicant timely traversed the election of species requirement in Paper No. 5.

The 35 U.S.C. 112, second paragraph, rejection with respect to the lack of a clear line of demarcation between the siloxane oligomer (a) and siloxane resin (d) of claim 10 has been rescinded due to the amendment of siloxane resin (d) to silicon resin (d) which is enabled and differentiated from the siloxane oligomer (a) on page 10, line 7 to page 11, line 8 and page 11, lines 8-12, respectively. The epoxy-endblocked third structure has been corrected in conformance with page 26, lines 19-29.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim 10 is rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for 1,3,5,7-tetramethylcyclotetrasiloxane and 1,3,5,7,9-pentamethylcyclopentanesiloxane, does not reasonably provide enablement

Art Unit: 1712

for cyclosiloxane (c). The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the invention commensurate in scope with these claims.

The rejection is maintained for the reasons of record set forth in the previous Office action. The arguments filed July 10, 2003 have been considered but are unpersuasive.

Nowhere in the specification, particularly that section alluding to species of organosilicon compound (C) on page 10, lines 12 and 13, nor in original claims 1-8 is there any enablement for the use of any cyclosiloxane other than the specifically types designated hereinabove. One skilled in the art would not be enabled to make and use the claimed composition without a full, clear, concise and exact identification of any other kinds of cyclosiloxanes other than the two named species. There is no statement anywhere in the specification that cyclosiloxanes in general are useful.

Claims 8-15 and 17-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakayoshi et al. in view of Fukui et al., Cole et al. and Japanese Patent No. 4046962.

The rejection is maintained for the reasons of record set forth in the previous Office action. The arguments filed July 10, 2003 have been considered but are unpersuasive.

Nakayoshi et al. qualifies as analogous prior art since its utility as a conductive adhesive (col. 2, lines 45-46) is identical to that of the claims (specification, page 28, line 20) and due to the equivalent components of an alkenyl groups-containing organopolysiloxane, an organohydrogensiloxane, silver flakes, a platinum catalyst and an epoxy-endblocked organosilicon compound. Thus, the primary reference to Nakayoshi is clearly within the field of applicants' endeavor and is analogous prior art as required in MPEP § 2141.01(a).

The primary reference of Nakayoshi et al. is analogous prior art. The secondary reference of Fukui et al. supplements the teachings of Nakayoshi et al. wherein it is recognized that the treatment of electrically conductive silver (col. 15, lines 21-22 and 49) with an organosilicon compound (col. 3, lines 16-40) imparts stabilization against oxidation and dispersibility enhancement (col. 15, lines 24-27).

It would have been obvious to treat the electrically conductive silver of Nakayoshi et al. with the organosilicon compound of Fukui et al. in order to provide stabilization against oxidation and to improve the dispersibility. The Board of Patent Appeals and Interferences in the affirmation of the 35 U.S.C. 103 rejection over Nakayoshi et al. in view of Fukui et al. in parent application no. 08/722,733 stated (page 8, second paragraph):

... "we do not find appellants' arguments that Fukui represents non-analogous art and that there would be a lack of motivation for the examiner's proposed modification of Nakayoshi convincing."

Art Unit: 1712

The low molecular siloxane of Nakayoshi et al. disclosed in column 3, lines 21-42 is not limited to the exemplified cyclic dimethylpolysiloxane decamer of column 8, line 23. Cyclotetrasiloxanes or cyclopentasiloxanes are clearly contemplated in column 3, lines 31-36 (the cyclic siloxane formula wherein n is from 3-25). However, the basis for the treatment of the silver flakes of Nakayoshi et al. with the organosilicon compound of Fukui et al. is not reliant upon the recitation in Nakayoshi et al. of the low molecular weight siloxane. The motivation for the treatment clearly rests with the acknowledgement in Fukui et al. that the treatment supplies stabilization against oxidation and improved dispersibility.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

(703) 308-2399 (Fax no. (703) 872-9311)
Monday to Friday, 9:30 to 6:00
rs
7/21/03



ROBERT E. SELLERS II
PRIMARY EXAMINER